## **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

### **Final**

## **MAJOR FACILITY REVIEW PERMIT**

# Issued To: West Contra Costa Sanitary Landfill, Inc. Facility #A1840

**Facility Address:** 

Foot of Parr Boulevard Richmond, CA 94801

**Mailing Address:** 

3260 Blume Drive, Suite 200 Richmond, CA 94806

### **Responsible Official**

Mr. Larry Burch Environmental Compliance Manager

510-262-1662

#### **Facility Contact**

Mr. Gary Ponder Manager of Landfill Gas Plant and Leachate Treatment Plant 510-620-0133

Type of Facility:	Landfill/Power Producer	BAAQMD Permit Division Contact
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Primary SIC: 4953 Carol Allen

**Product:** Electricity

### ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Peter Hess for Ellen Garvey	May 29, 2002
Ellen Garvey, Air Pollution Control Officer	Date

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### I. STANDARD CONDITIONS

#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 5/2/01);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 8/27/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 8/1/01);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 2/25/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 2/25/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 2/25/99); and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on 5/2/01).

#### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit was issued on May 29, 2002 and expires on April 30, 2007. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than October 31, 2006, and no earlier than April 30, 2006. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after** April 30, 2007. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for

### I. Standard Conditions

cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

#### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

#### **D.** Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

### I. Standard Conditions

### E. Records

- 1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
- 2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

#### F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be May 29, 2002 to October 31, 2002. The report shall be submitted by November 30, 2002. Subsequent reports shall be for the following periods: November 1st through April 30th and May 1st through October 31st, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

### **G.** Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be May 1st to April 30th. The certification shall be submitted by May 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

### I. Standard Conditions

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105 Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

#### **H.** Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
- 3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

### I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

#### J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

## II. EQUIPMENT

### **Table II A - Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
S-5	Internal Combustion Lean	Waukesha Lean Burn	7042 GL	1478 hp, 975 kW, 7040
	Burn Engine, fired			in <sup>3</sup> , 10.8 E6 BTU/hour,
	exclusively on landfill gas			300-450 scfm of landfill
				gas, based on heat
				contents of 600-400
				BTU/scf, respectively
S-6	Internal Combustion Lean	Waukesha Lean Burn	7042 GL	1478 hp, 975 kW, 7040
	Burn Engine, fired			in <sup>3</sup> , 10.8 E6 BTU/hour,
	exclusively on landfill gas			300-450 scfm of landfill
				gas, based on heat
				contents of 600-400
				BTU/scf, respectively
S-15	West Contra Costa Sanitary	Type of waste		Max. Design Capacity =
	Landfill Active Solid Waste	accepted are MSW,		18.2 E6 yd <sup>3</sup> (13.9 E6 m <sup>3</sup> )
	Disposal Site with Active	Commercial,		Max. Acceptance Rate
	Gas Collection System	Industrial, and		= 2500 tons/day
		Construction		Max. Cumulative Waste
				In Place = 10.92 E6 tons
	Landfill gas collection			16 collectors and
	system	Horizontal Collectors		53 wells
		Vertical Wells		
S-22	Primary Oil/Water Separator,	Polycal Plastics	SP-084-4	1,850 Gallon Capacity,
	TK-2			1200 Gallons/Hour
S-23	Secondary Oil/Water	AFL Industries	VTC-5	450 Gallon Capacity,
	Separator, TK-4			300 Gallons/Hour
S-24	Load Equalization Tank, TK-	Polycal Plastics	SPC-52	500 Gallon Capacity,
	7			1200 Gallons/Hour
S-25	Photo-Oxidizer Tank, TK-5	Ryan Herco	7353-030	300 Gallon Capacity,
				1200 Gallons/Hour
S-26	Neutralization Tank, TK-9	Polycal Plastics	SPC-52	500 Gallon Capacity,
				1200 Gallons/Hour
S-27	First Stage Clarifier, TK-8	Great Lakes	IPC-2-110	1200 Gallons/Hour

### II. Equipment

### **Table II A - Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
S-28	Air Stripper Sump	Polycal Plastics	SP-724-U	550 Gallon Capacity,
				1200 Gallons/Hour
S-29	Flocculation/Mixing Tank,	Custom Made	Custom	20,300 Gallon Capacity,
	TK-8A		made	1200 Gallons/Hour
S-30	Air Stripper	Terraqua		1200 Gallons/Hour, 200
				cfm
S-37	Internal Combustion Lean	Waukesha Lean Burn	7042 GL	1585 hp, 1050 kW, 7040
	Burn Engine, fired			in <sup>3</sup> , 9.55 E6 BTU/hour,
	exclusively on landfill gas			265-398 scfm of landfill
				gas, based on heat
				contents of 600-400
				BTU/scf, respectively
S-38	Secondary Oil/Water	Custom Made	Custom	780 Gallon Capacity,
	Separator, TK-4		Made	1200 Gallons/Hour
S-39	Sludge Storage Tank, TK-3	Custom Made	Custom	1100 Gallon Capacity,
			Made	1200 Gallons/Hour
S-40	Equalization Tank, TK-1	Custom Made	Custom	5000 Gallon Capacity,
			Made	1200 Gallons/Hour

Table II B – Abatement Devices

		Source(s)	Applicable	Operating	Limit or
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Efficiency
A-1	Carbon Adsorber	S-22, S-23,	BAAQMD	NMHC in inlet	Replace
	(in series with A-1 first	S-24, S-25,	Condition	and in A-1	carbon when
	followed by A-2)	S-26, S-27,	# 7463, Part 2	exhaust	NMHC
		S-28, S-29,			removal effi-
		S-38, S-39,			ciency is less
		and S-40			than 90% by
					volume

# II. Equipment

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	Limit or
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Efficiency
A-2	Carbon Adsorber	S-22, S-23,	BAAQMD	NMHC in A-2	Replace
	(in series with A-1 first	S-24, S-25,	Condition	exhaust	carbon upon
	followed by A-2)	S-26, S-27,	# 7463, Part 2		detection of 6
		S-28, S-29,			ppmv of
		S-38, S-39,			NMHC
		and S-40			
A-3	Carbon Adsorber	S-30	BAAQMD	NMHC in inlet	Replace
	(in series with A-3 first		Condition	and in A-3	carbon when
	followed by A-4)		# 7463, Part 3	exhaust	NMHC
					removal effi-
					ciency is less
					than 90% by
					volume
A-4	Carbon Adsorber	S-30	BAAQMD	NMHC in A-4	Replace
	(in series with A-3 first		Condition	exhaust	carbon upon
	followed by A-4)		# 7463, Part 3		detection of 6
					ppmv of
					NMHC
A-5	Carbon Adsorber	S-30	BAAQMD	NMHC in inlet	Replace
	(in series with A-5 first		Condition	and in A-5	carbon when
	followed by A-6)		# 7463, Part 3	exhaust	NMHC
					removal effi-
					ciency is less
					than 90% by
					volume
A-6	Carbon Adsorber	S-30	BAAQMD	NMHC in A-6	Replace
	(in series with A-5 first		Condition	exhaust	carbon upon
	followed by A-6)		# 7463, Part 3		detection of 6
					ppmv of
					NMHC

# II. Equipment

**Table II B – Abatement Devices** 

<b>A-</b> #	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-8	Landfill Gas Flare	S-15	BAAQMD 8-34-301.3,	Minimum combustion zone	98% destruction of
			see also	temperature of	THC
			Table IV-B	1400 °F, see also Table VII-B	and either 98%
					destruction of NMOC or
					< 30 ppmv of
					NMOC, as CH <sub>4</sub> , at 3% O <sub>2</sub> ,
					dry

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
- Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is included in Appendix A of this permit.

#### NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. All sources must comply with <u>both</u> versions of the rule until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Table III
Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (8/1/01)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (8/1/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (8/27/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	N
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y

# **III.** Generally Applicable Requirements

Table III Generally Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (5/15/96)	N
SIP Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (12/23/97)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 1	Hazardous Pollutants-Control of Lead Emissions	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 11, Rule 14	Hazardous Pollutants – Asbestos-Containing Serpentine	Y
BAAQMD Regulation 12, Rule	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y

### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included in Appendix A of this permit. All other text may be found in the regulations themselves.

Table IV – A
Source-specific Applicable Requirements
S-5 Internal Combustion Lean Burn Engine
S-6 Internal Combustion Lean Burn Engine

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement BAAQMD	Description of Requirement	(Y/N)	Date
Regulation 1	General Provisions and Definitions (10/7/1998)		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	
1-523.2	Limit on duration of in operation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of in-operation, tests, calibrations, adjustments, & maintenance	Y	
BAAQMD			
Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation	Organic Compounds - Solid Waste Disposal Sites (10/6/1999)		
8, Rule 34			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Record keeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control	Y	Expires
	System		7/1/02
			(exp. date
			not FE)
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorder	Y	7/1/02
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key emission control system operating parameters	Y	7/1/02

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
SIP			
Regulation	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		
8, Rule 34			
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	$\mathbf{Y}^{1}$	
8-34-113.3	Record keeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	$\mathbf{Y}^{1}$	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.4	Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)		
Regulation 9, Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999)		
Regulation			
9, Rule 2			
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon		
Regulation 9	Monoxide from Stationary Internal Combustion Engines (8/1/2001)		
Rule 8			
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	Y	
9-8-302.3	CO Emission Limit	Y	
40 CFR Part	Standards of Performance for New Stationary Sources – General		
60, Subpart	Provisions (5/4/1998)		
A			
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other	Y	
	Correspondence to the Administrator		
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing	Y	
	performance tests		
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part	Standards of Performance for New Stationary Sources – Emission		
60, Subpart	Guidelines and Compliance Times for Municipal Solid Waste		
Cc	Landfills (2/24/1999)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months	Y	
	After Initial NMOC Emission Rate Report Shows NMOC		
	Emissions ≥ 50 MG/year		
40 CFR Part	Approval and Promulgation of State Plans for Designated Facilities		
62	and Pollutants (9/20/2001)		

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.1115	Identification of Sources	Y	
BAAQMD Condition # 5771			
Part 1	Fuel Restrictions (Cumulative Increase)	Y	
Part 2	Diverter Valve Requirement (Regulation 8-34-301)	Y	
Part 3	Gas Flow Meter Requirement (Cumulative Increase and Regulation 8-34-508)	Y	
Part 4	NOx Emissions Limit (BACT)	Y	
Part 5	CO Emissions Limit (BACT)	Y	
Part 6	NMOC Emissions Limit (BACT and Regulation 8-34-301.4)	Y	
Part 7	Annual Source Test Requirement (BACT and Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)	Y	
Part 8	Heat Input Limitation (Regulation 2-1-301)	Y	
Part 9	Daily Record Keeping Requirement (Cumulative Increase and Regulations 2-1-301, 2-6-501, and 8-34-301)	Y	
Part 10	Engine Temperature Limit and Temperature Monitoring Requirements (8-34-301, 8-34-501.3, 8-34-501.11, 8-34-507, 8-34-509)	Y	Limit is effective: 1/1/03 Monitorin g is effective: 7/1/02

<sup>1</sup> This section has been removed from BAAQMD Regulations because it has been superseded.

Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (10/7/1998)		
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Reporting requirement for periods of inoperation > 24 hours	Y	
1-523.2	Limit on duration of inoperation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	
BAAQMD			
Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation (applies to A-8 Flare only)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Organic Compounds – Miscellaneous Operations (3/22/1995)		
Regulation			
8, Rule 2			
8-2-301	Miscellaneous Operations (applies to low VOC soil handling and	Y	
	disposal activities only)		
BAAQMD			
Regulation	Organic Compounds – Solid Waste Disposal Sites (10/6/1999)		
8, Rule 34			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-116	Limited Exemption, Well Raising	Y	
8-34-116.1	New Fill	Y	
8-34-116.2	Limits on Number of Wells Shutdown	Y	
8-34-116.3	Shutdown Duration Limit	Y	

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-116.4	Capping Well Extensions	Y	
8-34-116.5	Well Disconnection Records	Y	
8-34-117	Limited Exemption, Gas Collection System Components	Y	
8-34-117.1	Necessity of Existing Component Repairs/Adjustments	Y	
8-34-117.2	New Components are Described in Collection and Control System Design Plan	Y	
8-34-117.3	Meets Section 8-34-118 Requirements	Y	
8-34-117.4	Limits on Number of Wells Shutdown	Y	
8-34-117.5	Shutdown Duration Limit	Y	
8-34-117.6	Well Disconnection Records	Y	
8-34-118	Limited Exemption, Construction Activities	Y	
8-34-118.1	Construction Plan	Y	
8-34-118.2	Activity is Required to Maintain Compliance with this Rule	Y	
8-34-118.3	Required or Approved by Other Enforcement Agencies	Y	
8-34-118.4	Emission Minimization Requirement	Y	
8-34-118.5	Excavated Refuse Requirements	Y	
8-34-118.6	Covering Requirements for Exposed Refuse	Y	
8-34-118.7	Installation Time Limit	Y	
8-34-118.8	Capping Required for New Components	Y	
8-34-118.9	Construction Activity Records	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.3a	Enclosed Flare Destruction Efficiency	Y	Expires 7/1/02
8-34-301.3b	Limits for Enclosed Flares	Y	7/1/02
8-34-303a	Landfill Surface Requirements	Y	Expires 7/1/02
8-34-303b	Landfill Surface Requirements	Y	7/1/02
8-34-304	Gas Collection System Installation Requirements	Y	
8-34-304.1	Based on Waste Age For Inactive or Closed Areas	Y	

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
8-34-304.2	Based on Waste Age For Active Areas	Y	
8-34-304.3	Based on Amount of Decomposable Waste Accepted	Y	
8-34-304.4	Based on NMOC Emission Rate	Y	7/1/02
8-34-305	Wellhead Requirements	Y	7/1/02
8-34-305.1	Operate Under Vacuum	Y	7/1/02
8-34-305.2	Temperature < 55 °C	Y	7/1/02
8-34-305.3	Nitrogen < 20% or	Y	7/1/02
8-34-305.4	Oxygen < 5%	Y	7/1/02
8-34-405	Design Capacity Reports	Y	
8-34-408	Collection and Control System Design Plans	Y	
8-34-408.2	Sites With Existing Collection and Control Systems	Y	
8-34-411	Annual Report	Y	1/1/03
8-34-412	Compliance Demonstration Tests	Y	7/1/02
8-34-413	Performance Test Report	Y	7/1/02
8-34-414	Repair Schedule for Wellhead Excesses	Y	7/1/02
8-34-414.1	Records of Excesses	Y	7/1/02
8-34-414.2	Corrective Action	Y	7/1/02
8-34-414.3	Collection System Expansion	Y	7/1/02
8-34-414.4	Operational Due Date for Expansion	Y	7/1/02
8-34-415	Repair Schedule for Surface Leak Excesses	Y	7/1/02
8-34-415.1	Records of Excesses	Y	7/1/02
8-34-415.2	Corrective Action	Y	7/1/02
8-34-415.3	Re-monitor Excess Location Within 10 Days	Y	7/1/02
8-34-415.4	Re-monitor Excess Location Within 1 Month	Y	7/1/02
8-34-415.5	If No More Excesses, No Further Re-Monitoring	Y	7/1/02
8-34-415.6	Additional Corrective Action	Y	7/1/02
8-34-415.7	Re-monitor Second Excess Within 10 days	Y	7/1/02
8-34-415.8	Re-monitor Second Excess Within 1 Month	Y	7/1/02
8-34-415.9	If No More Excesses, No Further Re-monitoring	Y	7/1/02
8-34-415.10	Collection System Expansion for Third Excess in a Quarter	Y	7/1/02
8-34-415.11	Operational Due Date for Expansion	Y	7/1/02

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
8-34-416	Cover Repairs	Y	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.7	Waste Acceptance Records	Y	
8-34-501.8	Non-decomposable Waste Records	Y	
8-34-501.9	Wellhead Excesses and Repair Records	Y	7/1/02
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-505	Well Head Monitoring	Y	8/1/02
8-34-506	Landfill Surface Monitoring	Y	10/1/02
8-34-507	Continuous Temperature Monitor and Recorded	Y	
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-510	Cover Integrity Monitoring	Y	8/1/02
SIP			
Regulation	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		
8, Rule 34			
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y <sup>1</sup>	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.2	Enclosed Flare Destruction Efficiency	$\mathbf{Y}^{1}$	

# Table IV – B Source-specific Applicable Requirements S-15 WEST CONTRA COSTA SANITARY LANDFILL A-8 LANDFILL GAS FLARE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
8-34-301.4	Continuous Operation	Y	
8-34-303	Landfill Surface Requirement	$Y^{l}$	
8-34-501	Operating Records	Y	
8-34-501.1	Collection System Downtime	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Temperature Monitoring	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)		
Regulation			
9, Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999)		
Regulation			
9, Rule 2			
9-2-301	Limitations on Hydrogen Sulfide	N	
40 CFR	Standards of Performance for New Stationary Sources – General		
Part 60,	<b>Provisions</b> (5/4/1998)		
Subpart A			
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other	Y	
	Correspondence to the Administrator		
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	

<sup>&</sup>lt;sup>1</sup> This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

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		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operational before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR	Standards of Performance for New Stationary Sources – Emission		
Part 60,	Guidelines and Compliance Times for Municipal Solid Waste		
Subpart Cc	Landfills (2/24/1999)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months after Initial NMOC Emission Rate Report Shows NMOC Emissions ≥ 50 MG/year	Y	
40 CFR Part	Approval and Promulgation of State Plans for Designated Facilities		
62	and Pollutants (9/20/2001)		
62.1115	Identification of Sources	Y	
BAAQMD			
Condition #			
17821			
Part 1	Waste acceptance rate limits (Regulation 2-1-301)	Y	
Part 2	Acceptance criteria for soils containing VOCs (Regulation 8-40-301)	N	
Part 3	Emission limit for low VOC soils (Regulation 8-2-301)	Y	
Part 4	Particulate emission control measures (Regulations 2-1-403, 6-301, and 6-305)	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 5	Control requirements for collected landfill gas (Regulation 8-34-301)	Y	
Part 6	Landfill gas collection system description (Regulations 2-1-301, 8-	Y	
	34-301.1, 8-34-304, and 8-34-305)		
Part 7	Landfill gas collection system operating requirements (Regulation 8-	Y	
	34-301.1)		
Part 8	Flare operating restrictions and heat input limits (Cumulative	Y	
	Increase and Regulation 2-1-301)		
Part 9	Flare temperature limit (Toxic Risk Management Policy and	Y	
	Regulation 8-34-301.3)		
Part 10	Landfill gas sulfur content limit and monitoring requirements	Y	
	(Regulation 9-1-302)		
Part 11	Annual source test (Regulations 8-34-301.3 and 8-34-412)	Y	
Part 12	Annual landfill gas characterization test (Toxic Risk Management	Y	
	Policy and Regulation 8-34-412)		
Part 13	Toxic compound concentration limits (Toxic Risk Management	N	
	Policy)		
Part 14	Record keeping requirements (Cumulative Increase, 2-1-301, 2-6-501,	Y	
	6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)		

<sup>1</sup> This section has been removed from BAAQMD Regulations because it has been superseded.

Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

# Table IV – C Source-specific Applicable Requirements S-22 PRIMARY OIL/WATER SEPARATOR, TK-2 S-23 SECONDARY OIL/WATER SEPARATOR, TK-4 S-38 SECONDARY OIL/WATER SEPARATOR, TK-4 A-1 CARBON ADSORBER A-2 CARBON ADSORBER

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 8	Organic Compounds – Wastewater (Oil-Water) Separators (8/29/1994)		
8-8-301	Waste Water Separators Greater than 760 Liters Per Day and Smaller than 18.9 liters per second	Y	
8-8-301.3	OC Vapor Recovery System	Y	
8-8-303	Gauging and Sampling Devices	Y	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	Y	
8-8-503	Inspection and Repair Records	Y	
8-8-504	Portable Hydrocarbon Detector	Y	
BAAQMD Condition #7463			
Part 1	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 3	Operating restrictions for Secondary Oil/Water Separators (Cumulative Increase)	Y	
Part 4	Operating requirements for Oil/Water Separators (Regulations 8-8-301 and 8-8-303)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 7	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 8	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 9	Methane and non-methane measurement method (Cumulative Increase and Toxic Risk Management Policy)	Y	

Table IV – C
Source-specific Applicable Requirements
S-22 PRIMARY OIL/WATER SEPARATOR, TK-2
S-23 SECONDARY OIL/WATER SEPARATOR, TK-4
S-38 SECONDARY OIL/WATER SEPARATOR, TK-4
A-1 CARBON ADSORBER
A-2 CARBON ADSORBER

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 10.ac.	Carbon Adsorber monitoring requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 11.ae.	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 12	Permitting requirements for any future proposed revisions of Parts 5 or 8 (Cumulative Increase and Toxic Risk Management Policy)	Y	

Table IV – D

Source-specific Applicable Requirements
S-24 Load Equalization Tank, TK-7
S-25 Photo-Oxidizer Tank, TK-5
S-26 Neutralization Tank, TK-9
S-27 First Stage Clarifier, TK-8
S-28 Air Stripper Sump
S-39 Sludge Storage Tank, TK-3
S-40 Equalization Tank, TK-1

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds-Miscellaneous Operation (3/22/1995)	Y	
8-2-301  BAAQMD  Condition  #7463	Miscellaneous Operations	Y	
Part 1	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 11a	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	

# Table IV – E Source-specific Applicable Requirements S-30 AIR STRIPPER A-3 CARBON ADSORBER A-4 CARBON ADSORBER A-5 CARBON ADSORBER A-6 CARBON ADSORBER

Applicable Requiremen t	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 47	Air Stripping and Soil Vapor Extraction Operations (4/26/1995)		
8-47-301	Emission Control Requirement, Specific Compounds	Y	
8-47-302	Organic Compounds	Y	
8-47-501	Records	Y	
8-47-501.1	Water Analysis Records	Y	
8-47-501.2	Vapor Monitoring Results	Y	
8-47-601	Air Stripper Water Sampling	Y	
BAAQMD Condition #7463			
Part 2	Abatement requirement for POC emissions (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 5	Wastewater throughput limits (Cumulative Increase)	Y	
Part 6	POC leak limit for valves, flanges, and pumps (Cumulative Increase)	Y	
Part 7	Replacement requirements for second to last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 8	Replacement requirements for last Carbon Adsorber (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 9	Methane and non-methane measurement method (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 10.ac.	Carbon Adsorber monitoring requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	
Part 11.ae.	Record keeping requirements (Cumulative Increase and Toxic Risk Management Policy)	Y	

Table IV – E
Source-specific Applicable Requirements
S-30 AIR STRIPPER
A-3 CARBON ADSORBER
A-4 CARBON ADSORBER
A-5 CARBON ADSORBER
A-6 CARBON ADSORBER

Applicable	Regulation Title or Description of Requirement	Federally	Future
Requiremen		Enforceable	Effective
t		(Y/N)	Date
Part 12	Permitting requirements for any future proposed revisions of Parts 5 or 8 (Cumulative Increase and Toxic Risk Management Policy)	Y	

Table IV – F
Source-specific Applicable Requirements
S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (10/7/1998)		
1-523	Parametric Monitoring and Record keeping Procedures	Y	
1-523.1	Reporting requirement for periods of in-operation > 24 hours	Y	
1-523.2	Limit on duration of in operation	Y	
1-523.3	Reporting requirement for violations of any applicable limits	Y	
1-523.4	Records of in-operation, tests, calibrations, adjustments, &	Y	
	maintenance		
BAAQMD			
Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

# Table IV – F Source-specific Applicable Requirements S-37 Internal Combustion Lean Burn Engine

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 8,	Organic Compounds - Solid Waste Disposal Sites (10/6/1999)		
Rule 34			
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Record keeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4a	Energy recovery device or emission control system limit	Y	Expires 7/1/02
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	
8-34-413	Performance Test Report	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Records of Key Emission Control System Operating Parameters	Y	7/1/02
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key emission control system operating parameters	Y	7/1/02
SIP Regulation			
8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (3/22/1995)		

Table IV – F
Source-specific Applicable Requirements
S-37 Internal Combustion Lean Burn Engine

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	$\mathbf{Y}^{1}$	
8-34-113.3	Record keeping Requirement	Y	
8-34-301	Landfill Gas Collection and Emission Control System	Y	
	Requirements		
8-34-301.1	Collection and Control Systems Leak Limitations	Y	
8-34-301.3	Energy recovery device or emission control system limit	$\mathbf{Y}^{1}$	
8-34-301.4	Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.4	Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/1999)		
Regulation 9,			
Rule 2			
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon		
Regulation 9	Monoxide from Stationary Internal Combustion Engines (8/1/2001)		
Rule 8			
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit	Y	
9-8-302.3	CO Emission Limit	Y	
40 CFR Part	Standards of Performance for New Stationary Sources - General		
60, Subpart A	Provisions (5/4/1998)		

# Table IV – F Source-specific Applicable Requirements S-37 Internal Combustion Lean Burn Engine

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
60.4(b)	Requires Submission of Requests, Reports, Applications, and	Y	
	Other Correspondence to the Administrator		
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operation before performing performance tests	Y	
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part	Standards of Performance for New Stationary Sources – Emission		
60, Subpart Cc	Guidelines and Compliance Times for Municipal Solid Waste Landfills (2/24/1999)		
60.36c(a)	Collection and Control Systems in Compliance by 30 months After Initial NMOC Emission Rate Report Shows NMOC Emissions ≥ 50 MG/year	Y	7/1/02
40 CFR Part 62	Approval and Promulgation of State Plans for Designated		
	Facilities and Pollutants (11/19/2001)		
62.1115	Identification of Sources	Y	
BAAQMD			
Condition #			
17812			
Part 1	Fuel Restrictions (Offsets and Cumulative Increase)	Y	
Part 2	Heat Input Limits (Offsets and Cumulative Increase)	Y	

### Table IV – F Source-specific Applicable Requirements S-37 INTERNAL COMBUSTION LEAN BURN ENGINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 3	Continuous operating requirement (Regulation 8-34-301.1)	Y	
Part 4	Diverter Valve Requirement (Regulation 8-34-301)	Y	
Part 5	TOC Destruction Efficiency Requirement (Regulation 8-34-301.4)	Y	
Part 6	NO <sub>x</sub> Emission Limit (BACT)	Y	
Part 7	CO Emission Limit (BACT)	Y	
Part 8	POC Emission Limit (BACT)	Y	
Part 9	Gas flow meter and recorder requirement (Offsets and Cumulative	Y	
	Increase)		
Part 10	Annual source test requirement (BACT and Regulations 8-34-	Y	
	301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)		
Part 11	Record keeping requirements (BACT, Offsets, Cumulative	Y	
	Increase, and Regulation 8-34-501)		
Part 12	Engine Temperature Limit and Temperature Monitoring	Y	Limit is
	Requirements		effective:
	(8-34-301, 8-34-501.3, 8-34-501.11, 8-34-507, 8-34-509)		1/1/03
			Monitorin
			g is
			effective:
			7/1/02

<sup>1</sup> This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

### V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

### VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

#### **Condition # 5771**

For S-5, INTERNAL COMBUSTION LEAN BURN ENGINE, and For S-6, INTERNAL COMBUSTION LEAN BURN ENGINE:

- 1. The Internal Combustion Engines (S-5 and S-6) shall be fired exclusively on landfill gas. (basis: Cumulative Increase)
- 2. The A-8 Flare shall be operated when one or more Internal Combustion Engines (S-5, S-6, or S-37) are not operating, but A-8 shall not be operated when all three engines are operating concurrently. An automatically controlled landfill gas valve shall be installed and maintained to insure that landfill gas is immediately made available for flaring to the Flare, A-8, when one or more engines are down. Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during control system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 or to inadvertent component leaks that do not exceed the limits specified in 8-34-301.2. (basis: Regulation 8-34-301)
- 3. District approved flow meters, to measure landfill gas flow into each engine, shall be installed prior to any operation and maintained in good working condition. (basis: Cumulative Increase and Regulation 8-34-508)
- 4. Nitrogen Oxide (NO<sub>X</sub>) emissions from each Internal Combustion Engine (S-5 and S-6) shall not exceed 76 ppmv, corrected to 15% O<sub>2</sub>, dry basis. (basis: BACT)
- 5. Carbon Monoxide (CO) emissions from each Internal Combustion Engine (S-5 and S-6) shall not exceed 376 ppmv, corrected to 15% O, dry basis. (basis: BACT)

#### **Condition # 5771**

### **VI. Permit Conditions**

- 6. Until July 1, 2002, Non-Methane Organic Compound (NMOC) emissions from each Internal Combustion Engine (S-5 and S-6) shall not exceed 175 ppmv, expressed as methane, corrected to 15% O<sub>2</sub>, dry basis. Effective July 1, 2002, each engine shall comply with the more stringent NMOC limit in Regulation 8-34-301.4. (basis: BACT and Regulation 8-34-301.4)
- 7. In order to demonstrate compliance with parts #4, #5, and #6 above, Regulation 8, Rule 34, Sections 114 and 301.4, and Regulation 9, Rule 8, Sections 302.1 and 302.3, the Permit Holder shall ensure that a District approved source test is conducted annually on each Internal Combustion Engine (S-5 and S-6). The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. The annual source tests shall determine the following:
  - a. landfill gas flow rate to each engine (dry basis);
  - concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>),
     Methane (CH<sub>4</sub>), non-methane organic compounds (NMOC), and total hydrocarbons (THC) in the landfill gas;
  - c. exhaust gas flow rate from each engine (dry basis);
  - d. concentrations (dry basis) of NO<sub>x</sub>, CO, CH<sub>4</sub>, NMOC, THC, SO<sub>2</sub> and O<sub>2</sub> in the exhaust gas from each engine;
  - e. the CH<sub>4</sub>, NMOC, and THC destruction efficiencies achieved by each engine; and
  - f. the average cylinder temperature range (or exhaust temperature range measured at an APCO approved location) for each engine that is required to maintain compliance with Parts 4, 5, and 6 above and Regulation 8-34-301.4.

(basis: BACT, Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)

8. The heat input to each internal combustion engine shall not exceed 259.2 million BTU per day nor 94,608 million BTU per year. (basis: Regulation 2-1-301)

#### **Condition # 5771**

### **VI. Permit Conditions**

- 9. Daily records shall be maintained, in a District approved logbook, for the hours of operation of the engines and total amount of landfill gas flow through each engine. On a monthly basis, summarize all daily records for each engine. On a monthly basis, calculate and record the maximum daily and total monthly heat input rate (in BTU) to each engine based on the average methane concentration in the landfill gas (as measured during the most recent source test), a high heating value for methane of 1013 BTU/ft<sup>3</sup> at 60 degrees F, and the amount of landfill gas burned in each engine. The logbook shall be kept on site and shall be made available to the District staff upon request. All records shall be retained for at least 5 years from the date of entry. (basis: Cumulative Increase and Regulations 2-1-301, 2-6-501, and 8-34-301)
- 10. Effective January 1, 2003, the average cylinder temperature for each Internal Combustion Engine shall be maintained at the temperature determined by the most recent annual source, plus or minus 10 degrees F (or other appropriate range established by the source test) and averaged over 3 hours, during all times that the engine is operated. In order to demonstrate compliance with this condition, each engine shall be equipped with at least one thermocouple that will continuously monitor engine cylinder temperature (or engine exhaust temperature at an APCO approved location). The engine cylinder temperature (or average cylinder temperature if more than one thermocouple is used) shall be continuously recorded. These temperature monitors and recorders shall be installed and operating by no later than July 1, 2002. The appropriate temperature range for each engine that is established by the source tests shall be added to this part via an administrative amendment. (basis: Regulations 8-34-301, 8-34-501.3 and 8-34-507)

**Condition # 7463** 

For S-22, PRIMARY OIL/WATER SEPARATOR, TK-2;

For S-23, SECONDARY OIL/WATER SEPARATOR, TK-4;

For S-24, LOAD EQUALIZATION TANK, TK-7;

For S-25, PHOTO-OXIDIZER TANK, TK-5;

For S-26, NEUTRALIZATION TANK, TK-9;

For S-27, FIRST STAGE CLARIFIER, TK-8;

For S-28, AIR STRIPPER SUMP;

For S-29, FLOCCULATION/MIXING TANK, TK-8A;

For S-30, AIR STRIPPER;

For S-38, SECONDARY OIL/WATER SEPARATOR, TK-4;

For S-39, SLUDGE STORAGE TANK, TK-3;

For S-40, EQUALIZATION TANK, TK-1;

For A-1, CARBON ADSORBER;

For A-2, CARBON ADSORBER;

For A-3, CARBON ADSORBER;

For A-4, CARBON ADSORBER;

For A-5, CARBON ADSORBER; and

For A-6, CARBON ADSORBER:

- 1. The emissions of precursor organic compounds (POC) from the sources S-22, S-23, S-24, S-25, S-26, S-27, S-28, S-29, S-38, S-39, and S-40 shall be abated by the Carbon Adsorbers, A-1 and A-2 arranged in series, during all periods of operations. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 2. The emissions of POC from the Air Stripper (S-30) shall be abated by the Carbon Adsorbers, either A-3 and A-4 arranged in series, or A-5 and A-6 arranged in series, during all periods of operations. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 3. The two Secondary Oil/Water Separators (S-23 and S-38) shall not operate concurrently. (basis: Cumulative Increase)
- 4. The Oil/Water Separators (S-22, S-23, and S-38) shall have all the openings kept closed at all times except when the opening is used for the inspection and maintenance of the separators. (basis: Regulations 8-8-301 and 8-8-303)
- 5. The wastewater throughput rate to the leachate collection, recovery, and treatment system (LCRTS) shall not exceed 1200 gallons per hour; nor 28,800 gallons per day; nor 10,512,000 gallons per year. (basis: Cumulative Increase)

### **Condition # 7463**

- 6. The detectable POC leak emissions, as measured by a District approved portable monitor, shall not exceed 100 ppm above background at a distance of 1 cm from any of the valves, flanges, or pumps of LCRTS. (basis: Cumulative Increase)
- 7. The second to last Carbon Adsorber, A-1 and either A-3 or A-5, shall be replaced with fresh carbon upon the detection of 10% of the inlet stream to the Carbon Adsorber as measured by a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 8. The last Carbon Adsorber, A-2 and either A-4 or A-6, shall be replaced with fresh carbon upon the detection of break-through of 6 ppm as measured with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 9. The limit set forth in parts 7 and 8 shall apply to non-methane hydrocarbon emissions. To determine the presence of methane in the exhaust stream, a reading shall be taken with and without a carbon filter tip fitted on the OVA-FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purposes of these permit conditions. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 10. The operator of this system shall monitor with an FID, or other method approved in writing by the APCO, at the following locations and on the schedule described in subpart d. below:
  - a. at the inlet of A-1 and either A-3 or A-5:
  - b. at the exhaust of A-1 and either A-3 or A-5;
  - c. at the exhaust of A-2 and either A-4 or A-6.
  - d. If the time until predicted hydrocarbon breakthrough from the last carbon adsorber (calculated pursuant to Part 11.d. below) is greater than 30 days, then monitoring shall be conducted on a monthly basis. If the time until predicted hydrocarbon breakthrough is between 7 days and 30 days, then monitoring shall be conducted on a weekly basis. If the time until predicted hydrocarbon breakthrough is less than 7 days, then monitoring shall be conducted on a daily basis until the carbon is replaced.

(basis: Cumulative Increase and Toxic Risk Management Policy)

### **Condition # 7463**

- 11. The operator of the LCRTS shall maintain, in a District approved logbook, the following information:
  - a. daily records of wastewater throughput to the LCRTS;
  - b. each monitoring reading and analysis results for the day of operation they were taken:
  - c. calculate and record the frequency of carbon change out necessary to maintain compliance with part 7;
  - d. calculate and record the time of predicted hydrocarbon breakthrough from the last Carbon Adsorbers, to demonstrate compliance with part 8;
  - e. the dates and locations of all carbon bed replacements. (basis: Cumulative Increase and Toxic Risk Management Policy)
- 12. The project is restricted to emission limits set forth in part 8, and throughput rates stipulated in part 5. Any relaxation of these conditions that increase the emissions and/or throughput of wastewater will be subject to a full permit review as though construction at the site had not yet commenced. (basis: Cumulative Increase and Toxic Risk Management Policy)

### **Condition # 17812**

### For S-37, Internal Combustion Lean Burn Engine:

- 1. The S-37 Internal Combustion Engine shall be fired on landfill gas exclusively. (basis: Offsets and Cumulative Increase)
- 2. The heat input to S-37 shall not exceed 229.2 million BTUs per day nor 83,658 million BTUs during any consecutive 12-month period. (basis: Offsets and Cumulative Increase)
- 3. The S-37 Internal Combustion Engine shall operate continuously during all times that landfill gas is vented to the engine. (basis: Regulation 8-34-301.1)
- 4. In the event of shutdown of S-37, landfill gas shall be automatically diverted to the A-8 Flare. The A-8 Flare shall be operated when one or more Internal Combustion Engines (S-5, S-6, or S-37) are not operating, but A-8 shall not be operated when all three engines are operating concurrently. Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during control system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 or to inadvertent component leaks that do not exceed the limits specified in 8-34-301.2. (basis: Regulation 8-34-301)
- 5. Until July 1, 2002, S-37 shall achieve a minimum destruction efficiency of 97% by weight for total methane and non-methane organic compounds (NMOC). (basis: Regulation 8-34-301.4)
- 6. S-37 shall emit no more than 71 ppmv of nitrogen oxides on dry basis, corrected to 15% oxygen. (basis: BACT)
- 7. S-37 shall emit no more than 309 ppmv of carbon monoxide, dry basis, corrected to 15% oxygen. (basis: BACT)
- 8. Until July 1, 2002, S-37 shall emit no more than 122 ppmv of precursor organic compounds (POC), as methane, dry basis, corrected to 15% oxygen. (basis: BACT)
- 9. In order to demonstrate compliance with part 2, the IC Engine shall be equipped with a gas flow meter and recorder that records the gas flow rate at least every 15 minutes.

(basis: Offsets and Cumulative Increase)

#### **Condition # 17812**

- 10. In order to demonstrate compliance with parts 5 through 8 above and Regulations 8-34-301.4, 9-8-302.1, and 9-8-302.3, the Permit Holder shall ensure that a District approved source test is conducted annually on the S-37 Internal Combustion Engine. Source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test. They shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date.
  - a. landfill gas flow rate to the engine (dry basis);
  - b. concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), methane (CH<sub>4</sub>), non-methane organic compounds (NMOC), and total hydrocarbons (THC) in the landfill gas;
  - c. exhaust gas flow rate from the engine (dry basis);
  - d. concentrations (dry basis) of NO<sub>x</sub>, CO, CH<sub>4</sub>, NMOC, THC, SO<sub>2</sub> and O<sub>2</sub> in the exhaust gas from the engine;
  - e. the CH<sub>4</sub>, NMOC, and THC destruction efficiencies achieved by the engine; and
  - f. the average cylinder temperature range (or exhaust temperature range measured at an APCO approved location) for each engine that is required to maintain compliance with parts 4, 5, and 6 above and Regulation 8-34-301.4.

(basis: BACT, and Regulations 8-34-301.4, 8-34-412, 9-8-302.1, and 9-8-302.3)

- 11. The Permit Holder shall maintain the following records:
  - a. Records of all start up and shut down dates and times and the reason for any shut downs for S-37.
  - b. Records of landfill gas throughput to S-37.
  - c. On a monthly basis calculate and record the maximum daily and total monthly heat input rate (in BTU) to each engine based on the average methane concentration in the landfill gas (as measured during the most recent source test), a high heating value for methane of 1013 BTU/ft<sup>3</sup> at 60 degrees F, and the amount of landfill gas burned in each engine.
  - d. Records of all compliance demonstration test data.

All records shall be retained on site for a minimum of 5 years and shall be made available to District staff upon request. (basis: BACT, Offsets, Cumulative Increase, and Regulation 8-34-501)

### **Condition # 17812**

12. Effective January 1, 2003, the average cylinder temperature for the S-37 Internal Combustion Engine shall be maintained at the temperature determined by the most recent annual source, plus or minus 10 degrees F (or other appropriate range established by the source test) and averaged over 3 hours, during all times that the engine is operated. In order to demonstrate compliance with this condition, the engine shall be equipped with at least one thermocouple that will continuously monitor engine cylinder temperature (or engine exhaust temperature at an APCO approved location). The engine cylinder temperature (or average cylinder temperature if more than one thermocouple is used) shall be continuously recorded. These temperature monitors and recorders shall be installed and operating by no later than July 1, 2002. The appropriate temperature range for the engine that is established by the source tests shall be added to this part via an administrative amendment. (Basis: Regulations 8-34-301, 8-34-501.3 and 8-34-507)

### **Condition # 17821**

FOR: S-15, ACTIVE LANDFILL WITH LANDFILL GAS COLLECTION SYSTEM, AND FOR: A-8, LANDFILL GAS FLARE

- 1. Total waste accepted and placed at the landfill shall not exceed 2,500 tons in any single day. The total cumulative amount of all wastes placed in the landfill shall not exceed 10.92 million tons. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 18.2 million cubic yards. (basis: Regulation 2-1-301)
- \*2. This facility is not subject to Regulation 8, Rule 40 because the landfill does not accept contaminated soil (soil containing more than 50 ppmw of volatile organic compounds, VOCs). The following types of materials may be accepted:
  - a. Materials for which the Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211).
  - b. Materials for which the Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.

### **Condition # 17821**

- c. Materials which the Permit Holder plans to test in order to determine the VOC contamination level in the soil, provided that the material is sample within 24 hours of receipt by this site and is handled as if the soil were contaminated until the Permit Holder receives the test results. The Permit Holder shall collect soil samples in accordance with Regulation 8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.
  - i. If these test results indicate that the soil is still contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site or has completed treatment. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.
  - ii. If these test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with Regulation 8, Rule 40 any longer.

(basis: Regulation 8-40-301)

- 3. The Permit Holder shall limit the quantity of low VOC soil (soil that contains 50 ppmw or less of VOCs) disposed of per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.
  - a. Record on a daily basis the amount of low VOC soil disposed of in the landfill or used as cover material in the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c. below.
  - b. Record on a daily basis the VOC content of all low VOC soils disposed of or used as cover material. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or  $C_1$ ).
  - c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:

$$E = Q * C / 10^6$$

(basis: Regulation 8-2-301)

#### **Condition # 17821**

- 4. Water and/or dust suppressants shall be applied to all unpaved roadways and active soil removal and fill areas associated with this landfill as necessary to prevent visible particulate emissions. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions from vehicle traffic or wind. (basis: Regulations 2-1-403, 6-301, and 6-305)
- 5. All collected landfill gas shall be vented to properly operating abatement equipment including the Internal Combustion Engines (S-5, S-6, and S-37) or the Landfill Gas Flare (A-8). Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 or to inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (basis: Regulation 8-34-301)
- 6. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system described in Parts 6.a.-b. below. Increasing or decreasing the number of wells or collectors, or significantly changing the length of collectors, or the locations of wells or collectors are all considered to be modifications that are subject to the Authority to Construct requirement.
  - a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Application # 2417.

**Required Components** 

Total Number of Vertical Wells: 53
Total Number of Horizontal Collectors: 16

b. The Permit Holder has submitted Application # 2789 for a new separate gas collection and control system for the HWMF section of the landfill. This application is under review.

(basis: Regulations 2-1-301, 8-34-301.1, 8-34-304, 8-34-305)

7. The landfill gas collection system described in Part 6.a. shall be operated continuously. Wells shall not be shut off, disconnected or removed from operation without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (basis: Regulation 8-34-301.1)

#### **Condition # 17821**

- 8. The A-8 Landfill Gas Flare shall be operated when one or more engines (S-5, S-6, or S-37) are not operating. The A-8 Landfill Gas Flare shall not be operated when all three engines (S-5, S-6, and S-37) are operating. The Heat Input to the A-8 Landfill Gas Flare shall not exceed 544 million BTU per day nor 198,560 million BTU per year. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to the flare based on the landfill gas flow rate recorded pursuant to part 14, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/ft<sup>3</sup> at 60 degrees F. (basis: Cumulative Increase and Regulation 2-1-301)
- 9. The combustion zone temperature of the A-8 Landfill Gas Flare shall be maintained at a minimum of 1400 degrees Fahrenheit, averaged over any 3-hour period. This minimum temperature shall be adjusted via an administrative permit amendment, if a source test demonstrates compliance with all applicable requirements at a different temperature. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (basis: Toxic Risk Management Policy and Regulation 8-34-301.3)
- 10. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control system's exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the total sulfur content in collected landfill gas on a quarterly basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and quarterly thereafter. (basis: Regulation 9-1-302)
- 11. In order, to demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-8). As a minimum, the annual source test shall determine the following:
  - a. landfill gas flow rate to the flare (dry basis);

#### **Condition # 17821**

- b. concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), total hydrocarbons (THC), methane (CH<sub>4</sub>), and total non-methane organic compounds (NMOC) in the landfill gas;
- c. stack gas flow rate from the flare (dry basis);
- d. concentrations (dry basis) of NO<sub>x</sub>, CO, SO<sub>2</sub>, THC, CH<sub>4</sub>, NMOC, Benzene, Formaldehyde, Vinyl Chloride, and O<sub>2</sub> in the flare stack gas;
- e. the THC, CH<sub>4</sub>, and NMOC destruction efficiencies achieved by the flare; and
- f. the average combustion temperature in the flare during the test period.

The first annual source test shall be conducted by no later than October 1, 2002. Subsequent source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test. They shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. (basis: Regulations 8-34-301.3 and 8-34-412)

12. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by part 11 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 11.b, the landfill gas shall be analyzed for all the compounds listed in the most recent version of EPA's AP-42 Table 2.4-1. All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. After conducting three annual landfill gas characterization tests, the Permit Holder may request to remove specific compounds from the list of compounds to be tested for if the compounds have not been detected, have no significant impact on the cancer risk determination for the site, and have no significant impact on the hazard index determination for the site. (basis: Toxic Risk Management Policy and Regulation 8-34-412)

### **Condition # 17821**

\*13. If the concentrations (dry basis) of toxic air contaminants in the collected landfill gas exceed any of the limits listed below, the Permit Holder shall submit a permit application for a Change of Permit Conditions within 30 days of receiving the test results.

Benzene	=	8.9	ppmv
Chlorobenzene	=	1.5	ppmv
Trichloroethylene	=	0.873	ppmv
Ethylbenzene	=	41	ppmv
Vinyl Chloride	=	6.4	ppmv
Xylene	=	78	ppmv
Toluene	=	110	ppmv

(basis: Toxic Risk Management Policy)

- 14. In order to demonstrate compliance with the above conditions, the Permit Holder shall maintain the following records in a District approved logbook.
  - a. Record the total amount of municipal solid waste received at S-15 on a daily basis. Summarize the daily waste acceptance records for each calendar month.
  - For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell.
     Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
  - c. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
  - d. Maintain daily records of low VOC soil acceptance rate and emissions, pursuant to part 3.
  - e. Record of the dates, locations, and frequency per day of all watering activities on unpaved roads or active soil or fill areas. Record the dates, locations, and type of any dust suppressant applications. Record the dates and description of all paved roadway cleaning activities. All records shall be summarized on monthly basis.
  - f. Record the initial operation date for each new landfill gas well and collector.

### **Condition # 17821**

- g. Maintain an accurate map of the landfill which indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to part 6.a. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
- h. Record the operating times and the landfill gas flow rate to the A-8 Landfill Gas Flare on a daily basis. Summarize these records on a monthly basis. Calculate and record the heat input to A-8, pursuant to part 8.
- i. Maintain continuous records of the combustion zone temperature for the A-8 Landfill Gas Flare during all hours of operation.
- j. Maintain records of all test dates and test results performed to maintain compliance parts 10, 11, and 12 above or to maintain compliance with any applicable rule or regulation.

All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations.

(basis: Cumulative Increase, 2-1-301, 2-6-501, 6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)

# VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII – A

Applicable Limits and Compliance Monitoring Requirements
S-5 Internal Combustion Lean Burn Engine
S-6 Internal Combustion Lean Burn Engine

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Opacity	BAAQMD	Y		Ringelmann No. 1 for < 3		N	
	6-301			minutes/hr			
FP	BAAQMD	Y		0.15 grains/dscf		N	
	6-310						
TOC	BAAQMD	Y		1000 ppmv as methane	BAAQMD	P/Q	Quarterly
(Total	8-34-301.2			(component leak limit)	8-34-501.6		Inspection
Organic					and 8-34-503		and
Com-							Records
pounds							
Plus							
Methane							
)							
TOC	SIP	Y		1000 ppmv as methane	SIP	P/Q	Quarterly
	8-34-301.1			(component leak limit)	8-34-503		Inspection
TOC	BAAQMD	Y		90% removal by weight	BAAQMD	P/A	Annual
	8-34-114				Condition #		Source
					5771, Part 7		Test

Type of	Citation of	FE	Future Effective		Monitoring Requiremen	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
TOC	SIP	Y		90% removal by weight	BAAQMD	P/A	Annual
	8-34-114				Condition #		Source
					5771, Part 7		Test
Non-	BAAQMD	Y	7/1/02	98% removal by weight	BAAQMD	P/A	Initial and
Methane	8-34-301.4b			OR	8-34-412 and		Annual
Organic				< 120 ppmv,	8-34-501.4		Source
Com-				dry basis @ 3% O <sub>2</sub> ,	and		Tests and
pounds				expressed as methane	BAAQMD		Records
(NMOC)					Condition #		
					5771, Part 7		
NMOC	BAAQMD	Y	Expires	$\leq$ 175 ppmv,	BAAQMD	P/A	Annual
	Condition		7/1/02	dry basis @ 15% O <sub>2</sub> ,	Condition #		Source
	# 5771,			expressed as methane	5771, Part 7		Test
	Part 6						
$SO_2$	BAAQMD	Y		Property Line Ground		N	
	9-1-301			Level Limits			
				$\leq$ 0.5 ppm for 3 minutes,			
				$\leq$ 0.25 ppm for 60			
				minutes, and $\leq 0.05$ ppm			
				for 24 hours			
$SO_2$	BAAQMD	Y		≤ 300 ppm (dry)	BAAQMD	P/Q and	Quarterly
	9-1-302				Condition #	P/A	Sulfur
					17821,		Analysis of
					Part 10		Landfill
					and		Gas and
					BAAQMD		Annual
					Condition #		Source
					5771, Part 7		Test

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
$H_2S$	BAAQMD	N		Property Line ground		N	
	9-2-301			level limits $\leq 0.06$ ppm			
				Averaged over 3			
				minutes and $\leq 0.03$ ppm			
				Averaged over 60			
				minutes			
NO <sub>x</sub>	BAAQMD	Y		Waste Fuel Gas, Lean-	BAAQMD	P/A	Annual
	9-8-302.1			Burn	Condition #		Source
				$\leq$ 140 ppmv,	5771, Part 7		Test
				dry basis @ 15% O <sub>2</sub>			
$NO_x$	BAAQMD	Y		≤ 76 ppmv,	BAAQMD	P/A	Annual
	Condition			dry basis @ 15% $O_2$	Condition #		Source
	# 5771,				5771, Part 7		Test
	Part 4						
CO	BAAQMD	Y		Waste Fuel Gas:	BAAQMD	P/A	Annual
	9-8-302.3			$\leq$ 2000 ppmv,	Condition #		Source
				dry basis @ 15% O <sub>2</sub>	5771, Part 7		Test
CO	BAAQMD	Y		$\leq$ 315 ppmv,	BAAQMD	P/A	Annual
	Condition			dry basis @ 15% $O_2$	Condition #		Source
	# 5771,				5771, Part 7		Test
	Part 5						
Heat	BAAQMD	Y		259.2 MM BTU per day	BAAQMD	С	Gas Flow
Input	Condition			(each engine) and	Condition #		Meter and
	# 5771,			94,608 MM BTU per year	5771,		Recorder
	Part 8			(each engine)	Parts 3 and 9		and
							Records

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Gas Flow	BAAQMD	Y	7/1/02	Vent all collected gases	BAAQMD	C	Gas Flow
	8-34-301			to a properly operating	8-34-501.10		Meter and
	and 301.1			control system and	and 508		Recorder
				operate control system	(effective		(every 15
				continuously.	7/1/02)		minutes);
							effective
							7/1/02
Gas Flow	SIP	Y		Vent all collected gases	SIP	P/D	Operating
	8-34-301			to a properly operating	8-34-501.1		Records
	and 301.4			control system and			
				operate control system			
				continuously.			
Gas Flow	BAAQMD	Y	7/1/02	Upon shut down of and	BAAQMD	C	Gas Flow
	Condition			engine (S-5 or S-6),	Condition #		Meter and
	# 5771,			automatically divert	5771, Part 3		Recorder
	Part 2			excess collected gas the			
				A-8 Flare			
Emission	BAAQMD	Y		240 hours/year	BAAQMD	P/D	Records
Control	8-34-113.2				8-34-501.2		
System					and		
Shutdow					BAAQMD		
n Time					Condition #		
					5771, Part 9		
Emission	SIP	Y		12 hours/calendar month	SIP	P/D	Records
Control	8-34-113.2				8-34-501.2		
System							
Shutdow							
n Time							

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Engine	BAAQMD	Y	1/1/03	To be established during	BAAQMD	С	Temperatur
Cylinder	Condition			first source test	8-34-507 and		e sensor
or	# 5771,			conducted after permit	8-34-509		and
Exhaust	Part 10			issuance	(effective		continuous
Temper-					7/1/02)		recorder;
ature							effective
							7/1/02
Periods	BAAQMD	Y		15 consecutive	BAAQMD	P/D	Records of
of	1-523.2			days/incident and	1-523.4		occurrence
Inopera-				30 calendar days/12			and
tion for				month period			duration
Para-							
metric							
Monitors							
Contin-	40 CFR	Y		Requires Continuous	40 CFR	P/D	Records of
uous	60.13(e)			Operation except for	60.7(b)		occurrence
Monitors				breakdowns, repairs,			and
				calibration, and required			duration
				span adjustments			

Table VII – B

Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Collectio	BAAQMD	Y		For Inactive/Closed	BAAQMD	P/E	Records
n System	8-34-304.1			Areas: collection system	8-34-501.7		
Installa-				components must be	and 501.8		
tion				installed and operating	and		
Dates				by	BAAQMD		
				2 years + 60 days	Condition #		
				after initial waste	17821, Parts		
				placement	14.bc. and		
					14.fg.		
Collectio	BAAQMD	Y		For Active Areas:	BAAQMD	P/E	Records
n System	8-34-304.2			Collection system	8-34-501.7		
Installa-				components must be	and 501.8		
tion				installed and operating	and		
Dates				by	BAAQMD		
				5 years + 60 days	Condition #		
				after initial waste	17821, Parts		
				placement	14.bc. and		
					14.fg.		
Collectio	BAAQMD	Y		For Any Uncontrolled	BAAQMD	P/E	Records
n System	8-34-304.3			Areas or Cells: collection	8-34-501.7		
Installa-				system components must	and 501.8		
tion				be installed and	and		
Dates				operating within 60 days	BAAQMD		
				after the uncontrolled	Condition #		
				area or cell accumulates	17821, Parts		
				1,000,000 tons of	14.ac. and		
				decomposable waste	14.fg.		

Table VII – B

Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requiremen t Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow  Gas Flow	BAAQMD 8-34-301 and 301.1 SIP 8-34-301 and 301.4	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system  Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly	BAAQMD 8-34-501.10 and 508 (effective 7/1/02) SIP 8-34-501.1	C P/D	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02 Operating Records
Gas Flow	BAAQMD Condition # 17821, Parts 5, 6, and 7	Y		operating control system  Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD Condition # 5771, Part 9; BAAQMD Condition # 17812, Part 11; and BAAQMD Condition # 17821, Parts 14.fh.	P/D	Records of Landfill Gas Flow Rates, Collection and Control Systems Downtime, and Collection System Component
Collectio n and Control Systems Shutdow n Time	BAAQMD 8-34-113.2	Y		240 hours/year nor 5 consecutive days	BAAQMD 8-34-501.1	P/D	S Operating Records

T	Citation of	FE	Future Effective		Monitoring	Monitoring	Maritania
Type of Limit	Limit	Y/N	Date	Limit	Requiremen t Citation	Frequency (P/C/N)	Monitoring Type
Collectio n and Control Systems Shutdow	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.1	P/D	Operating Records
n Time  Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y		15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors
Contin- uous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuou s Monitors
Wellhea d Pressure	BAAQMD 8-34-305.1	Y	7/1/02	< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Temper- ature of Gas at Wellhea d	BAAQMD 8-34-305.2	Y	7/1/02	< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Gas	BAAQMD	Y	7/1/02	$N_2 < 20\%$ <b>OR</b> $O_2 < 5\%$	BAAQMD	P/M	Monthly
Concen-	8-34-305.3				8-34-414,		Inspection
trations	or 305.4				501.9 and		and
at					505.3 or		Records
Wellhea					505.4		
d							
Well	BAAQMD	Y		No more than 5 wells at a	BAAQMD	P/D	Records
Shutdow	8-34-116.2			time or 10% of total	8-34-116.5		
n Limits				collection system,	and 501.1		
				whichever is less			
Well	BAAQMD	Y		24 hours per well	BAAQMD	P/D	Records
Shutdow	8-34-116.3				8-34-116.5		
n Limits					and 501.1		
Well	BAAQMD	Y		No more than 5 wells at a	BAAQMD	P/D	Records
Shutdow	8-34-117.4			time or 10% of total	8-34-117.6		
n Limits				collection system,	and 501.1		
				whichever is less			
Well	BAAQMD	Y		24 hours per well	BAAQMD	P/D	Records
Shutdow	8-34-117.5				8-34-117.6		
n Limits					and 501.1		
TOC	BAAQMD	Y		1000 ppmv as methane	BAAQMD	P/Q	Quarterly
(Total	8-34-301.2			(component leak limit)	8-34-501.6		Inspection
Organic					and 503		of
Com-							collection
pounds							and control
Plus							system
Methane							component
)							s with OVA
							and
							Records

Type of Limit	Citation of	FE Y/N	Future Effective Date	Limit	Monitoring Requiremen t Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection with OVA
TOC	BAAQMD 8-34-303a	Y	Expires 7/1/02	1000 ppmv as methane at 3 inches above surface		N	
TOC	BAAQMD 8-34-303b	Y	7/1/02	500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records
TOC	SIP 8-34-303	Y		1000 ppmv as methane at 3 inches above surface		N	
TOC	BAAQMD 8-34-301.3a	Y	Expires 7/1/02	98% removal by weight (applies to A-8 Flare only)	BAAQMD Condition # 17821, Part 11	P/A	Annual Source Test
TOC	SIP 8-34-301.2	Y		98% removal by weight (applies to A-8 Flare only)	BAAQMD Condition # 17821, Part 11	P/A	Annual Source Test

Table VII – B

Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Туре
Non-	BAAQMD	Y	7/1/02	98% removal by weight	BAAQMD	P/A	Initial and
Methane	8-34-301.3b			OR	8-34-412 and		Annual
Organic				< 30 ppmv,	8-34-501.4		Source
Com-				dry basis @ 3% O <sub>2</sub> ,	and		Tests and
pounds				expressed as methane	BAAQMD		Records
(NMOC)				(applies to A-8 Flare	Condition #		
				only)	17821,		
					Part 11		
Temper-	BAAQMD	Y		CT ≥ 1400 °F,	BAAQMD	С	Temperatur
ature of	Condition			averaged over any 3-	8-34-501.3		e Sensor
Combus-	# 17821,			hour period	and 507, SIP		and
tion	Part 9			(applies to A-8 Flare	8-34-501.3		Recorder
Zone				only)	and		(continuou
(CT)					BAAQMD		s)
					Condition#		
					17821,		
					Part 14.i.		
Total	BAAQMD	Y		15 pounds/day or	BAAQMD	P/D	Records
Carbon	8-2-301			300 ppm, dry basis	Condition #		
				(applies only to aeration	17821,		
				of or use as cover soil of	Part 3		
				soil containing ≤ 50			
				ppmw of volatile organic			
				compounds)			
Volatile	BAAQMD	N		Facility shall not accept	BAAQMD	P/E	Records
Organic	Condition			soil containing more than	Condition #		
Com-	# 17821,			50 ppmw of VOC	17821,		
pounds	Part 2				Part 2		

Type of Limit	Citation of	FE Y/N	Future Effective Date	Limit	Monitoring Requiremen t Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD	Y	Date	Ringelmann No. 1 for < 3	BAAQMD	P/E, M	Records of
Opacity	6-301	1		minutes/hr	Condition	P/E, IVI	all site
	0-301			(applies to S-15 Landfill			
					#17821,		watering
				operations)	Part 14.i.		and road
							cleaning
							events
Opacity	BAAQMD	Y		Ringelmann No. 1 for < 3		N	
	6-301			minutes/hr			
				(applies to A-8 Flare)			
FP	BAAQMD	Y		≤ 0.15 grains/dscf		N	
	6-310			(applies to A-8 Flare			
				only)			
$SO_2$	BAAQMD	Y		Property Line Ground		N	
	9-1-301			Level Limits:			
				$\leq$ 0.5 ppm for 3 minutes			
				and $\leq 0.25$ ppm for 60			
				min. and ≤0.05 ppm for 24			
				hours			
$SO_2$	BAAQMD	Y		≤300 ppm (dry basis)	BAAQMD	P/A	Source
	Regulation			(applies to A-8 Flare	Condition		Test
	9-1-302			only)	# 17821,		
					Part 10		
Total	BAAQMD	Y		≤ 1300 ppmv	BAAQMD	P/Q	Sulfur
Sulfur	Condition				Condition		analysis of
Content	# 17821,				# 17821,		landfill gas
in	Part 10				Part 10		
Landfill							
Gas							

Table VII – B

Applicable Limits and Compliance Monitoring Requirements
S-15 WEST CONTRA COSTA SANITARY LANDFILL
A-8 LANDFILL GAS FLARE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
H <sub>2</sub> S	BAAQMD	N	Date	Property Line Ground	t Citation	N	Турс
1125	9-2-301	11		Level Limits:		14	
	7-2-301			≤ 0.06 ppm,			
				averaged over 3 minutes			
				and $\leq 0.03$ ppm,			
				averaged over 60 minutes			
Amaunt	BAAQMD	Y		≤ 2500 tons/day and	BAAQMD	P/D	Records
Amount		1			_	P/D	Records
of Waste	Condition # 17821,			≤ 10,920,000 tons (cumulative amount of all	Condition # 17821,		
Accepte				wastes) and	ĺ		
a	Part 1			$\leq 18,200,000 \text{ yd}^3$	Part 14.a.		
				≤ 18,200,000 yd (cumulative amount of all			
				`			
				wastes and cover			
	D. A. COMD	***		materials)	DA A OMB	D/D	D 1
Heat	BAAQMD	Y		≤ 544 MM BTU per day	BAAQMD	P/D	Records
Input	Condition			and	Condition #		
	# 17821,			≤ 198,560 MM BTU per	17821, Part 8		
m · · · ·	Part 8			year	D. 1. 0.1 (D.	B/4	
Toxic Air	BAAQMD	N		Benzene 8.9	BAAQMD	P/A	Annual
Contam-	Condition			ppmv	Condition #		Landfill
inants	# 17821,			Chlorobenzene 1.5	17821,		Gas
	Part 13			ppmv	Part 12		Analysis
				Trichloroethylene			
				0.873			
				ppmv			
				Ethylbenzene 41			
				ppmv			
				Vinyl Chloride 6.4			
				ppmv			
				Xylene 78 ppmv			
				Toluene 110			
				ppmv			

# Table VII - C Applicable Limits and Compliance Monitoring Requirements S-22 PRIMARY OIL/WATER SEPARATOR, TK-2 S-23 SECONDARY OIL WATER SEPARATOR, TK-4 S-38 SECONDARY OIL WATER SEPARATOR, TK-4 A-1 CARBON ADSORBER A-2 CARBON ADSORBER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Organic	BAAQMD	Y		combined collection and	BAAQMD	P/D, W, M	Monthly,
Com-	8-8-301.3			removal efficiency of at	Condition #		Weekly, or
pounds				least 95% by weight	7463, Parts		Daily FID
					10.ac. and		Measure-
					11.ae.		ments at
							Carbon
							Adsorbers
							and Daily
							Records of
							Wastewate
							r
							Throughpu
							t
Organic	BAAQMD	Y		all gauging and sampling		N	
Com-	8-8-303			devices shall have vapor			
pounds				tight covers, seals, or lids			
NMOC	BAAQMD	Y		carbon replacement upon	BAAQMD	P/D, W, M	Monthly,
	Condition			detection of an outlet	Condition #		Weekly, or
	# 7463,			NMOC concentration	7463, Parts		Daily FID
	Part 7			(from A-1) that is 10% or	10.a., 10.b.,		Measure-
				more of the inlet NMOC	11.b., 11.c.,		ments at
				concentration	and 11.e.		Carbon
							Adsorber
							(inlet and
							outlet) and
							Records

# Table VII - C Applicable Limits and Compliance Monitoring Requirements S-22 PRIMARY OIL/WATER SEPARATOR, TK-2 S-23 SECONDARY OIL WATER SEPARATOR, TK-4 S-38 SECONDARY OIL WATER SEPARATOR, TK-4 A-1 CARBON ADSORBER A-2 CARBON ADSORBER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
NMOC	BAAQMD	Y		carbon replacement upon	BAAQMD	P/D, W, M	Monthly,
	Condition			detection of an outlet	Condition #		Weekly, or
	# 7463,			NMOC concentration	7463, Parts		Daily FID
	Part 8			(from A-2) of 6 ppmv	10.c., 11.b.,		Measure-
					11.d., and		ment at
					11.e.		Carbon
							Adsorber
							(outlet) and
							Records
POC	BAAQMD	Y		Leak Limit for Valves,		N	
	Condition			Flanges, and Pumps of:			
	# 7463,			100 ppmv of POC above			
	Part 6			background at 1 cm from			
				any component			
Waste-	BAAQMD	Y		1200 Gallons/Hour	BAAQMD	P/D	Records
water	Condition			28,800 Gallons/Day	Condition #		
Through	# 7463,			10,512,000 Gallons/Year	7463,		
- put	Part 5				Part 11.a.		
Limits							

### Table VII - D

**Applicable Limits and Compliance Monitoring Requirements** 

S-24 LOAD EQUALIZATION TANK, TK-7

S-25 PHOTO-OXIDIZER TANK, TK-5

S-26 NEUTRALIZATION TANK, TK-9

S-27 FIRST STAGE CLARIFIER, TK-8

S-28 AIR STRIPPER SUMP

S-39 SLUDGE STORAGE TANK, TK-3

S-40 EQUALIZATION TANK, TK-1

Type of	Citation of	FE	Future Effective		Monitoring Requiremen	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Total	BAAQMD	Y		15 Pounds/Day or	BAAQMD	P/D	Records
Carbon	8-2-301			300 ppm, dry basis	Condition #		
					7463,		
					Part 11.a.		
Waste-	BAAQMD	Y		1200 Gallons/Hour	BAAQMD	P/D	Records
water	Condition			28,800 Gallons/Day	Condition #		
Through	# 7463,			10,512,000 Gallons/Year	7463,		
- put	Part 5				Part 11.a.		
Limits							
POC	BAAQMD	Y		Leak Limit for Valves,		N	
	Condition			Flanges, and Pumps of:			
	# 7463,			100 ppmv of POC above			
	Part 6			background at 1 cm from			
				any component			

Table VII –E
Applicable Limits and Compliance Monitoring Requirements
S-30 AIR STRIPPER
A-3 TO A-6, CARBON ADSORBERS

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Total	BAAQMD	Y		control device shall	BAAQMD	P/D, W, M	Monthly,
Organic	8-47-301			reduce total organic	8-47-501.1,		Weekly, or
Com-	and			compound emissions to	8-47-501.2,		Daily FID
pounds	8-47-302			the atmosphere by at	and 8-47-601		Measure-
(TOC)				least:	and		ments at
				90% by weight	BAAQMD		Carbon
					Condition #		Adsorbers,
					7463, Parts		Daily
					10.ac. and		Records of
					11.ae.		Wastewate
							r
							Throughpu
							t and
							Monthly
							Records of
							Water
							Analyses
NMOC	BAAQMD	Y		carbon replacement upon	BAAQMD	P/D, W, M	Monthly,
	Condition			detection of an outlet	Condition #		Weekly, or
	# 7463,			NMOC concentration	7463, Parts		Daily FID
	Part 7			(from A-3 or A-5) that is	10.a., 10.b.,		Measure-
				10% or more of the inlet	11.b., 11.c.,		ments at
				NMOC concentration	and 11.e.		Carbon
							Adsorbers
							(inlet and
							outlet) and
							Records

# Table VII –E Applicable Limits and Compliance Monitoring Requirements S-30 AIR STRIPPER A-3 TO A-6, CARBON ADSORBERS

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
NMOC	BAAQMD	Y		carbon replacement upon	BAAQMD	P/D, W, M	Monthly,
	Condition			detection of an outlet	Condition #		Weekly, or
	# 7463,			NMOC concentration	7463, Parts		Daily FID
	Part 8			(from A-4 or A-6) of 6	10.c., 11.b.,		Measure-
				ppmv	11.d., and		ments at
					11.e.		Carbon
							Adsorbers
							(outlet) and
							Records
POC	BAAQMD	Y		Leak Limit for Valves,		N	
	Condition			Flanges, and Pumps of:			
	# 7463,			100 ppmv of POC above			
	Part 6			background at 1 cm from			
				any component			
Waste-	BAAQMD	Y		1200 Gallons/Hour	BAAQMD	P/D	Records
water	Condition			28,800 Gallons/Day	Condition #		
Through	# 7463,			10,512,000 Gallons/Year	7463,		
- put	Part 5				Part 11.a.		
Limits							

Table VII – F

Applicable Limits and Compliance Monitoring Requirements

\$37 - Internal Combustion Lean Burn Engine

T. 4			Future		Monitoring	Monitoring	35 11
Type of	Citation of	FE	Effective	T ::4	Requiremen t Citation	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		Ringelmann No. 1 for < 3		N	
	6-301			minutes/hr			
FP	BAAQMD	Y		0.15 grains/dscf		N	
	6-310						
TOC	BAAQMD	Y		1000 ppmv as methane	BAAQMD	P/Q	Quarterly
(Total	8-34-301.2			(component leak limit)	8-34-501.6		Inspection
Organic					and 8-34-503		and
Com-							Records
pounds							
Plus							
Methane							
)							
TOC	SIP	Y		1000 ppmv as methane	SIP	P/Q	Quarterly
	8-34-301.1			(component leak limit)	8-34-503		Inspection
TOC	BAAQMD	Y	Expires	97% removal by weight	BAAQMD	P/A	Annual
	8-34-301.4a		7/1/02		Condition #		Source
	and				17812,		Test
	BAAQMD				Part 10		
	Condition						
	# 17812,						
	Part 5						
TOC	SIP	Y		97% removal by weight	BAAQMD	P/A	Annual
	8-34-301.3				Condition #		Source
					17812,		Test
					Part 10		

Table VII – F

Applicable Limits and Compliance Monitoring Requirements

\$37 - Internal Combustion Lean Burn Engine

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Туре
Non-	BAAQMD	Y	7/1/02	98% removal by weight	BAAQMD	P/A	Initial and
Methane	8-34-301.4b	_	., .,	OR	8-34-412 and	-,	Annual
Organic				< 120 ppmv,	8-34-501.4		Source
Com-				dry basis @ 3% O <sub>2</sub> ,	and		Tests and
pounds				expressed as methane	BAAQMD		Records
(NMOC)				•	Condition #		
					17812,		
					Part 10		
POC	BAAQMD	Y	Expires	<u>&lt;</u> 122 ppmv,	BAAQMD	P/A	Annual
	Condition		7/1/02	dry basis @ 15% O <sub>2</sub> ,	Condition #		Source
	# 17812,			expressed as methane	17812,		Test
	Part 8				Part 10		
$SO_2$	BAAQMD	Y		Property Line Ground		N	
	9-1-301			Level Limits			
				$\leq$ 0.5 ppm for 3 minutes,			
				$\leq$ 0.25 ppm for 60			
				minutes, and $\leq 0.05$ ppm			
				for 24 hours			
$SO_2$	BAAQMD	Y		≤ 300 ppm (dry)	BAAQMD	P/Q and	Quarterly
	9-1-302				Condition #	P/A	Sulfur
					17821,		Analysis of
					Part 10		Landfill
					and		Gas and
					BAAQMD		Annual
					Condition #		Source
					17812,		Test
					Part 10		
$H_2S$	BAAQMD	N		Property Line ground		N	
	9-2-301			level limits $\leq 0.06$ ppm			
				Averaged over 3			
				minutes and $\leq 0.03$ ppm			
				Averaged over 60			
				minutes			

Table VII – F

Applicable Limits and Compliance Monitoring Requirements

\$37 - Internal Combustion Lean Burn Engine

Type of	Citation of	FE Y/N	Future Effective	Limit	Monitoring Requiremen	Monitoring Frequency	Monitoring
Limit		Y	Date		t Citation	(P/C/N)	Type Annual
$NO_x$	9-8-302.1	Y		Waste Fuel Gas, Lean- Burn	BAAQMD Condition #	P/A	Source
	9-8-302.1			≤ 140 ppmv,	17812,		Test
					Part 10		1681
NO	DAAOMD	Y		dry basis @ 15% O <sub>2</sub>		P/A	Annual
$NO_x$	BAAQMD Condition	I		≤71 ppmv, dry basis @ 15% O <sub>2</sub>	BAAQMD Condition #	P/A	Source
				dry basis @ 15% O <sub>2</sub>	17812,		Test
	# 17812,						Test
	Part 6	<b>3</b> 7		Wasts Frank Carr	Part 10	P/A	A
CO	BAAQMD	Y		Waste Fuel Gas:	BAAQMD	P/A	Annual
	9-8-302.3			$\leq 2000 \text{ ppmv},$	Condition #		Source
				dry basis @ 15% O <sub>2</sub>	17812,		Test
	DA A OMD	37		. 200	Part 10	D/A	A 1
CO	BAAQMD	Y		≤ 309 ppmv,	BAAQMD Condition #	P/A	Annual Source
	Condition			dry basis @ 15% O <sub>2</sub>	17812,		
	# 17812,				1		Test
TT	Part 7	37		220 2 MM DTH 1	Part 10	C	C El
Heat	BAAQMD	Y		229.2 MM BTU per day	BAAQMD	С	Gas Flow
Input	Condition			and 83,658 MM BTU per	Condition #		Meter and
	# 17812,			consecutive 12-month	17812, Parts		Recorder
	Part 2			period	9 and 11.c.		and
G 71	D		= /4 /0.5			-	Records
Gas Flow	BAAQMD	Y	7/1/02	Vent all collected gases	BAAQMD	С	Gas Flow
	8-34-301			to a properly operating	8-34-501.10		Meter and
	and 301.1			control system and	and 508		Recorder
				operate control system	(effective		(every 15
				continuously.	7/1/02)		minutes);
							effective
G	975				977	D. 75	7/1/02
Gas Flow	SIP	Y		Vent all collected gases	SIP	P/D	Operating
	8-34-301			to a properly operating	8-34-501.1		Records
	and 301.4			control system and			
				operate control system			
				continuously.			

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

Limit Limit Y	FE //N Y	Date 7/1/02	Continuously; Upon	Requiremen t Citation BAAQMD Condition #	Frequency (P/C/N)	Monitoring Type
Gas Flow BAAQMD Condition # 17812,			Operate S-37 continuously; Upon	BAAQMD		
Condition # 17812,	Y	//1/02	continuously; Upon		C	
# 17812,			• •			Gas Flow
						Meter and
Parts 3 & 4			shutdown of S-37 or if	17812, Part 9		Recorder
			any amount of gas			
			exceeds the capacity of			
			S-37, return gas to A-8			
			Flare automatically			
	Y		240 hours/year	BAAQMD	P/D	Records
Control 8-34-113.2				8-34-501.2		
System				and		
Shutdow				BAAQMD		
n Time				Condition #		
				17812,		
				Part 11.a.		
Emission SIP	Y		12 hours/calendar month	SIP	P/D	Records
Control 8-34-113.2				8-34-501.2		
System						
Shutdow						
n Time						
Engine BAAQMD	Y	1/1/03	To be established during	BAAQMD	C	Temperatur
Cylinder Condition			first source test	8-34-507 and		e sensor
or # 17812,			conducted after permit	8-34-509		and
Exhaust Part 12			issuance	(effective		continuous
Temper-				7/1/02)		recorder;
ature						effective
						7/1/02
Periods BAAQMD	Y		15 consecutive	BAAQMD	P/D	Records of
of 1-523.2			days/incident and	1-523.4		occurrence
Inopera-			30 calendar days/12			and
tion for			month period			duration
Para-			•			
metric						
Monitors						

Table VII – F
Applicable Limits and Compliance Monitoring Requirements
S37 – INTERNAL COMBUSTION LEAN BURN ENGINE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requiremen	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	t Citation	(P/C/N)	Type
Contin-	40 CFR	Y		Requires Continuous	40 CFR	P/D	Records of
uous	60.13(e)			Operation except for	60.7(b)		occurrence
Monitors				breakdowns, repairs,			and
				calibration, and required			duration
				span adjustments			

# VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6-301		Emissions
BAAQMD 6-310	Particulate W eight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate
BAAQMD	Organic Compound Emission	Manual of Procedures, Volume IV, ST-7, Organic
8-2-301	Limitation for Miscellaneous Operations	Compounds; or EPA Reference Method 25 or 25A
BAAQMD	OC Vapor Recovery System,	Manual of Procedures, Volume IV, ST-7, Organic
8-8-301.3	collection and removal efficiency limit	Compounds; or EPA Reference Method 25 or 25A
BAAQMD	Gauging and Sampling	EPA Reference Method 21, Determination of Volatile
8-8-303	Devices	Organic Compound Leaks
BAAQMD	Energy Recovery Device and	Manual of Procedures, Volume IV, ST-7, Organic
8-34-114	Emission Control System	Compounds and ST-14, Oxygen, Continuous Sampling; or
		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Collection and Control	EPA Reference Method 21, Determination of Volatile
8-34-301.2	System Leak Limitations	Organic Compound Leaks
BAAQMD	Limits for Flares	Manual of Procedures, Volume IV, ST-7, Organic
8-34-301.3		Compounds and ST-14, Oxygen, Continuous Sampling; or
		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Limits for Other Emission	Manual of Procedures, Volume IV, ST-7, Organic
8-34-301.4	Control Systems	Compounds and ST-14, Oxygen, Continuous Sampling; or
		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile
8-34-303		Organic Compound Leaks
BAAQMD	Wellhead Gauge Pressure	APCO Approved Device
8-34-305.1		
BAAQMD	Wellhead Temperature	APCO Approved Device
8-34-305.2		

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Wellhead Nitrogen	EPA Reference Method 3C, Determination of Carbon
8-34-305.3		Dioxide, Methane, Nitrogen, and Oxygen from Stationary
		Sources
BAAQMD	Wellhead Oxygen	EPA Reference Method 3C, Determination of Carbon
8-34-305.4		Dioxide, Methane, Nitrogen, and Oxygen from Stationary
		Sources
BAAQMD	Compliance Demonstration	EPA Reference Method 18, Measurement of Gaseous
8-34-412	Test	Organic Compound Emissions by Gas Chromatography,
		Method 25, Determination of Total Gaseous Nonmethane
		Organic Emissions as Carbon, Method 25A, Determination
		of Total Gaseous Organic Concentration Using a Flame
		Ionization Analyzer, or Method 25C, Determination of
		Nonmethane Organic Compounds (NMOC) in MSW
		Landfill Gases
SIP	Energy Recovery Device and	Manual of Procedures, Volume IV, ST-7, Organic
8-34-114	Emission Control System	Compounds; or
		EPA Reference Method 25 or 25A
SIP	Collection and Control	EPA Reference Method 21, Determination of Volatile
8-34-301.1	Systems Leak Limitations	Organic Compound Leaks
SIP	Flare Limit	Manual of Procedures, Volume IV, ST-7, Organic
8-34-301.2		Compounds; or
		EPA Reference Method 25 or 25A
SIP	Energy Recovery Device or	Manual of Procedures, Volume IV, ST-7, Organic
8-34-301.3	Emission Control System	Compounds; or
	Limit	EPA Reference Method 25 or 25A
SIP	Landfill Surface Requirements	EPA Reference Method 21, Determination of Volatile
8-34-303		Organic Compound Leaks
BAAQMD	Emission Control	Manual of Procedures, Volume IV, ST-7, Organic
8-47-301	Requirement, Specific	Compounds; or
	Compounds	EPA Reference Method 25 or 25A
BAAQMD	Organic Compounds	Manual of Procedures, Volume IV, ST-7, Organic
8-47-302		Compounds; or
		EPA Reference Method 25 or 25A
BAAQMD	Limitations on Ground Level	Manual of Procedures, Volume VI, Part 1, Ground Level
9-1-301	Concentrations (SO <sub>2</sub> )	Monitoring for Hydrogen Sulfide and Sulfur Dioxide

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302	(SO <sub>2</sub> )	Continuous Sampling, or
		ST-19B, Total Sulfur Oxides, Integrated Sample
BAAQMD	Limitations on Hydrogen	Manual of Procedures, Volume VI, Part 1, Ground Level
9-2-301	Sulfide	Monitoring for Hydrogen Sulfide and Sulfur Dioxide
BAAQMD	Waste Derived Fuel Gas NOx	Manual of Procedures, Volume IV, ST-13A, Oxides of
9-8-302.1	Limits for Lean Burn Engines	Nitrogen, Continuous Sampling and ST-14, Oxygen,
		Continuous Sampling
BAAQMD	Waste Derived Fuel Gas CO	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
9-8-302.3	Limits	Continuous Sampling and ST-14, Oxygen, Continuous
		Sampling
40 CFR 60.8	Performance Tests	EPA Reference Method 18, Measurement of Gaseous
		Organic Compound Emissions by Gas Chromatography,
		Method 25, Determination of Total Gaseous Nonmethane
		Organic Emissions as Carbon, Method 25A, Determination
		of Total Gaseous Organic Concentration Using a Flame
		Ionization Analyzer, or Method 25C, Determination of
		Nonmethane Organic Compounds (NMOC) in MSW
		Landfill Gases
BAAQMD	NO <sub>x</sub> Emissions Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of
Condition #		Nitrogen, Continuous Sampling and ST-14, Oxygen,
5771, Part 4		Continuous Sampling
BAAQMD	CO Emissions Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Condition #		Continuous Sampling and ST-14, Oxygen, Continuous
5771, Part 5		Sampling
BAAQMD	NMOC Emissions Limit	Manual of Procedures, Volume IV, ST-7, Organic
Condition #		Compounds and ST-14, Oxygen, Continuous Sampling; or
5771, Part 6		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Heat Input Limits	APCO approved gas flow meter and APCO approved
Condition #		calculation procedure described in BAAQMD Condition #
5771, Part 8		5771, Part 9
BAAQMD	Engine Temperature Limit	APCO Approved Thermocouples
Condition #		
5771, Part 10		

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	POC Leak Limit for Valves,	EPA Reference Method 21, Determination of Volatile
Condition #	Flanges, and Pumps	Organic Compound Leaks
7463, Part 6		
BAAQMD	Replacement requirements for	APCO Approved Organic Vapor Analyzer, Flame Ionization
Condition #	second to last carbon	Detector (OVA -FID) and APCO Approved Procedures
7463, Part 7	adsorber	Described in BAAQMD Condition # 7463, Parts 9 and 10
BAAQMD	Replacement requirements for	APCO Approved Organic Vapor Analyzer, Flame Ionization
Condition #	last carbon adsorber	Detector (OVA -FID) and APCO Approved Procedures
7463, Part 8		Described in BAAQMD Condition # 7463, Parts 9 and 10
BAAQMD	Heat Input Limits	APCO approved gas flow meter and APCO approved
Condition #		calculation procedure described in BAAQMD Condition #
17812, Part 2		17812, Part 11.c.
BAAQMD	TOC Destruction Efficiency	Manual of Procedures, Volume IV, ST-7, Organic
Condition #	Requirement	Compounds and ST-14, Oxygen, Continuous Sampling; or
17812, Part 5		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	NO <sub>x</sub> Emissions Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of
Condition #		Nitrogen, Continuous Sampling and ST-14, Oxygen,
17812, Part 6		Continuous Sampling
BAAQMD	CO Emissions Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
Condition #		Continuous Sampling and ST-14, Oxygen, Continuous
17812, Part 7		Sampling
BAAQMD	POC Emissions Limit	Manual of Procedures, Volume IV, ST-7, Organic
Condition #		Compounds and ST-14, Oxygen, Continuous Sampling; or
17812, Part 8		EPA Reference Method 18, 25, 25A, or 25C
BAAQMD	Engine Temperature Limit	APCO Approved Thermocouples
Condition #		
17812, Part		
12		
BAAQMD	Acceptance Criteria for Soils	BAAQMD 8-40-601 and EPA Reference Methods 8015B
Condition #	containing VOCs	and 8021B; or EPA Reference Method 21
17821, Part 2	(VOC determination)	
BAAQMD	Emission Limit for Low VOC	BAAQMD 8-40-601 and EPA Reference Methods 8015B
Condition #	Soils	and 8021B; or EPA Reference Method 21 and APCO
17821, Part 3		Approved Calculation Procedure Described in BAAQMD
		Condition # 17821, Part 3

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Heat Input Limits	APCO approved gas flow meter and APCO approved
Condition #		calculation procedure described in BAAQMD Condition #
17821, Part 8		17821, Part 8
BAAQMD	Flare Combustion	APCO Approved Device
Condition #	Temperature Limit	
17821, Part 9		
BAAQMD	Landfill Gas Sulfur Content	Draeger Tube: used in accordance with manufacturer's
Condition #	Limit	recommended procedures
17821, Part		
10		
BAAQMD	Toxic Compound	APCO approved sampling procedures described in
Condition #	Concentration Limits (in	BAAQMD Condition # 17821, Part 12 and GC Analysis for
17821, Part	landfill gas)	all compounds listed in AP-42 Chapter 2.4
13		

# IX. PERMIT SHIELD

Not Applicable

# X. GLOSSARY

#### **ACT**

Federal Clean Air Act

#### **APCO**

Air Pollution Control Officer: Head of Bay Area Air Quality Management District

#### **ARB**

Air Resources Board

## **BAAQMD**

Bay Area Air Quality Management District

#### **BACT**

Best Available Control Technology

#### **Basis**

The underlying authority which allows the District to impose requirements.

#### CAA

The federal Clean Air Act

## **CAAQS**

California Ambient Air Quality Standards

#### **CAPCOA**

California Air Pollution Control Officers Association

## **CEQA**

California Environmental Quality Act

# **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

# CH4 or CH<sub>4</sub>

Methane

#### CO

Carbon Monoxide

#### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

#### **District**

The Bay Area Air Quality Management District

#### EG

**Emission Guidelines** 

#### **EPA**

The federal Environmental Protection Agency.

## **Excluded**

Not subject to any District Regulations.

#### Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS) Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

#### FID

Flame Ionization Detector

#### FP

Filterable particulate as measured by BAAQMD Method ST-15, Particulate.

## H2S or H2S

Hydrogen Sulfide

#### **HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

#### **LFG**

Landfill Gas

# **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

## MAX or Max.

Maximum

#### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

#### MIN or Min.

Minimum

#### **MOP**

The District's Manual of Procedures.

#### **MSW**

Municipal solid waste

#### MW

Molecular weight

#### **NAAQS**

National Ambient Air Quality Standards

#### **NESHAPs**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

#### **NMHC**

Non-methane Hydrocarbons (same as NMOC).

#### **NMOC**

Non-methane Organic Compounds (same as NMHC).

# NOx or NO<sub>x</sub>

Oxides of nitrogen.

#### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by 40

CFR Part 60 and District Regulation 10.

#### **NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### $O2 \text{ or } O_2$

Oxygen

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

#### Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

#### **POC**

**Precursor Organic Compounds** 

#### $\mathbf{PM}$

**Total Particulate Matter** 

#### PM10 or PM<sub>10</sub>

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

#### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

#### SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

## SO2 or SO<sub>2</sub>

Sulfur dioxide

## THC

Total Hydrocarbons includes all NMHC plus methane (same as TOC).

## Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

## TOC

Total Organic Compounds includes all NMOC plus methane (same as THC).

## **TPH**

Total Petroleum Hydrocarbons

#### **TRMP**

Toxic Risk Management Policy.

## TRS

Total Reduced Sulfur

## **TSP**

Total Suspended Particulate

# VOC

Volatile Organic Compounds

## **Units of Measure:**

bhp	=	brake-horsepower
btu	=	<b>British Thermal Unit</b>
BTU	=	<b>British Thermal Unit</b>
°C	=	degrees Centigrade
cfm	=	cubic feet per minute
dscf	=	dry standard cubic feet
°F	=	degrees Fahrenheit
$\mathrm{ft}^3$	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower

hr hour = lb pound =lbmol pound-mole in inches = $m^2$ square meter =  $m^3$ cubic meters = min minute = mm million =million MM MM BTU =million BTU MMcf million cubic feet = Mg mega grams = ppb parts per billion ppbv parts per billion by volume = parts per million ppm =parts per million, by volume ppmv =ppmw parts per million, by weight = pounds per square inch, absolute psia = pounds per square inch, gauge psig =scf standard cubic feet standard cubic feet per minute scfm = sdcf standard dry cubic feet = sdcfm standard dry cubic feet per minute yd yard =  $yd^3$ cubic yards =year yr

# XI. APPLICABLE STATE IMPLEMENTATION PLAN

The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website. The address is:

http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1